Author Index—1986

Ackermann, R, ab9
Agarwal, JB, 121, ab20
Akaishi, M, 121, ab10, ab20
Aldridge, KW, ab14
Alexander, GW, Jr, 56, 118, 190
Ammar, IA, ab12, ab14, ab16
Amparo, EG, ab19
Andrews, J, ab8
Appledorn, CR, ab18
Araya, G, 75
Armitage, DL, ab11
Armstrong, LK, 63
Askenase, AD, 121, ab20
Augustine, S, 202

Baker, WJ, 236
Balady, GJ, 135
Barber, JM, 196, ab14, ab15
Bartlett, B, 193
Bauman, JM, 15
Beanblossom, M, 143
Beightol, RW, 206
Benedetto, AR, 218
Bennett, GW, ab3
Berger, DE, 1
Berger, HJ, ab4
Berry, E, ab16
Blend, MJ, 75
Blondeau, KL, 11, ab9
Bolser, B, ab14
Brooks, KM, ab10, ab12, ab16
Brown, PH, ab17
Brunken, RC, ab16
Brust, K, 132
Burns, RL, ab11
Burpo, SM, 11
Buth, JC, ab13

Callahan, RJ, 206
Campbell, S, 6
Caranto, R, 196, ab14, ab15
Carey, JS, ab7
Carlson, C, ab16
Carretta, R, ab11
Carretta, RF, 225
Christian, PE, 63, 235
Circe, P, ab12
Colaneri, R, ab3
Cole, P, ab5, ab19
Collins, J, 59
Cooley, LA, ab13
Coombs, BJ, ab17
Cooper, JA, ab11
Cordero, SV, ab16
Cradduck, TD, 236
Crandall, CR, ab8
Crucitti, TW, 185
Cuarón, A, 70
Cyr, L, 66

DaCosta, M, ab12
Datz, FL, 113
Davis, RT, ab13
Davison, A, 6
Dean, JF, ab7
DeLand, FH, 59
DeLaney, M, ab4, ab12
DePuey, EG, ab4
DeSantis, M, ab3, ab10, ab16
Devlin, KK, ab13
Dick, D, 66
Doherty, P, ab17
Dohler, W, ab18
Dornfest, DJ, ab19
Dragotakes, SC, 206
Drubach, L, ab5
Dubovsky, EV, 196, ab14, ab15

Ehrhardt, GJ, ab6
Eklem, MJ, ab4, ab15, ab17
Elam, DA, 111
English, RJ, 6, 18
Ensminger, W, ab8
Exten, RE, 50

Fanning, P, ab10, ab12
Farnum, GD, 1
Feiglin, DHI, 149
Feindel, CM, ab11
Fisher, RS, ab16, ab19
Fitzgibbon, C, ab13
Ford, E, ab3
Forestiere, A, ab9
Fry, PD, ab11

Galt, JR, 152
Garcia, EV, 21, 152, ab4
Garcia, R, ab4
Garrett, KB, ab16
Gilbert, SW, ab4, ab15
Gionet, M, ab17
Gladstone, PJ, ab11
Glenn, HJ, ab7
Glowniak, JV, ab17
Gober, A, ab4
Goeckler, WF, ab6
Goldsmith, SJ, ab4, ab12
Go, RT, 149
Graham, LS, 105
Gray, JC, ab17
Gray, LL, ab17
Green, AM, 135
Groenewoud, M, 44
Gross, M, ab14
Grunwald, AM, ab10

Hanelin, L, 34
Harcke, HT, ab13
Hardy, TL, ab10
Harler, MB, 193
Harpen, MD, 3
Hattner, R, ab7
Hawkins, RA, ab16
Haynie, TP, ab7
Hedrick, WR, 183
Helfant, RH, 121, ab10, ab20
Hendee, WR, 42
Hewlitt, S, ab9
Hise, HL, 152
Hise, S, ab8
Hoffman, MA, ab7
Hoffman, TJ, ab6
Holly, A, ab14
Holman, BL, 6
Holmes, RA, 11, ab6, ab9
Howell, AR, ab18
Hubbard, F, ab18
Hubble, WL, ab13
Huckell, VF, ab11
Huda, W, 66, 199
Hupp, BD, 202

Jakubowski, AT, ab11
Jenkins, J, ab11
Jennings, CA, 210
John, M, ab7
Johnson, DE, ab18
Johnson, RF, Jr, ab19
Jones, AG, 6
Juni, JE, ab5, ab8, ab9, ab11, ab19

Karam, PM, 149
Kasecamp, W, ab5, ab18
Kazikiewicz, JM, ab6
Keeffe, EB, ab4, ab15
King, MA, ab17
Klein, LW, 121, ab10, ab20
Knight, LC, ab10, ab14, ab16
Knutsen, C, ab8
Koller, D, ab5, ab18, ab19
Kontzen, FN, 196, ab14, ab15
Krepshaw, JD, ab18
Krevsky, B, ab16, ab19
Krishnamurthy, GT, ab4, ab15, ab17

LaDue, RJ, ab8
Laffin, SM, 210
LaFrance, ND, ab5, ab18, ab19
Lairmore, TA, ab9
Landry, AJ, 15
LeDoux, E, ab17
Lenane, P, 146
Lerner, MS, ab4
Levin, K, 175
Lieberman, DA, ab4, ab15
Ling, M, ab14
Lister-James, J, 6
Luckey, M, ab12
Lull, RJ, 79
Lyster, DM, ab1

MacFarlane, S, 34
Machac, J, ab12
MacIntyre, WJ, 149
Magoun, S, 59
Mahoney, M, 193
Malekian, T, ab11
Malmud, LS, ab16, ab19
Mandell, GA, ab13
Marciano, D, ab16
Markwell, R, ab3, ab8, ab13
Matiets, M, 138
Matin, P, 225, ab11
Mattis, JA, ab14
Maurer, AH, ab10, ab12, ab14, ab16, ab19
McCarthy, CE, 135
McClendon, BJ, 50, 185
McKeever, P, ab9
McKenzie, EH, ab6
Meier, D, ab12
Mena, IG, ab16
Meyers, L, ab5
Moeller, RJ, ab8
Monk, G, ab16
Moore, M, ab7
Moreno, AJ, 1
Morris, GL, 79
Mountz, J, ab9

Nagel, MV, 202
Nagle, C, 44
Nelp, WB, 132
Nelson, PM, 1
Noack, PB, ab8
Noever, T, 89
Nowak, DJ, 152

O'Connor, S, 66
O'Donnell, JK, 149
Okerlund, MD, ab14
O'Neill, W, ab11
Oppenheim, BE, ab18

Paberzs, A, ab9
Palac, RT, ab17
Pappas, VM, 185
Partain, CL, ab10
Patel, K, 193
Pavel, DG, 75
Pearson, GR, 192
Penn, K, ab5
Perkins, W, 59
Perri, JL, ab5, ab19
Petry, NA, 206
Pitt, S, ab5
Plankey, MW, ab4
Preston, DF, ab18
Prevost, WJ, ab19
Price, D, ab7

Rada, R, 175
Rao, SA, ab7
Ratliff, B, 34
Reichle, R, ab5
Reiter, P, ab14
Rippin, R, ab19
Robin, B, ab10
Robinson, RG, ab18
Ropchan, GA, ab11
Rosen, ST, ab6
Rosenwasser, R, ab10
Rowell, KL, 196, ab15
Rubinstein, RI, 121, ab20
Ruel, JM, 63
Runge, VM, ab10
Russell, CD, 196, ab14, ab15
Ryan, AL, ab13

Saha, GB, 149
Savant, V, ab4, ab12
Schneider, RM, 121, ab10, ab20
Schwinger, RB, ab17
Scott, JW, 196, ab14, ab15
Scuto, J, ab3
Seawright, SJ, ab11
Seelaus, PA, 121, ab20
Shapiro, B, ab14
Sharkey, CA, ab13
Shealy, DJ, ab14
Shih, W-J, 59
Siegel, JA, 175, ab5, ab10, ab16
Silverstein, EA, ab3, ab8, ab13
Simon, J, ab6
Sirotta, PS, 132
Sledge, CB, 18
Soon, P, 34
Sorensen, KA, 1
Spera, J, ab16
Spies, SM, ab3, ab6, ab8, ab13
Spies, WG, ab3, ab8, ab13
Stafford-Schuck, K, ab9
Steffel, FG, ab7
Stewart, MA, ab11
Stipp, V, 59
Strand, S-E, ab19
Stringham, LM, ab6
Stutzman, ME, 196, ab15
Suto, P, ab14
Swanson, DP, 206
Szasz, IJ, ab11

Tang, YN, ab3
Tantayakom, S, 75
Taren, J, ab9
Tatum, JL, ab7
Taylor, A, Jr, 63
Thomas, GS, ab10
Thorne, DA, 113
Thorson, LM, 163
Tremblay, PC, ab11
Treves, ST, ab13
Troutner, DE, ab6
Turbiner, E, 193
Turner, P, ab14

Vaillancourt, J, 206
Van den Abbeele, AD, ab13
Venkatesan, P, 18
Vitti, RA, ab10
Volkert, WA, ab6

Wahl, RL, ab14
Wahner, HW, 163
Wallis, JW, ab14, ab19

Wang, GJ, ab9
Warber, S, ab8, ab9, ab11
Watkins, D, ab12
Wcislo, WJ, 184, 238
Weber, J, ab4, ab12
Wegst, AV, ab18
Weinberg, FM, ab10
Weintraub, WS, 121, ab10
Wellman, HN, ab18
Wierzbinski, R, 59
Wilson, RA, ab17
Wingardh, K, ab19
Wintjen, M, ab3
Wirrell, J, 49, 116
Wolf, E, ab5
Wollmer, P, 111
Wollner, I, ab8
Wu-Connolly, L, ab19
Wynant, GE, 121, ab10, ab20
Yamanashi, WS, ab10
Yost, PE, ab13
Zalutsky, M, 18
Zimmer, AM, ab3, ab6, ab8, ab13
Zipper, J, ab10, ab16
Ziskin, MC, 175

Subject Index—1986

Absorptiometry
bone
mineral density, ab12
technetium-99m MDP effects, lumbar spine, ab12
technical considerations, ab13
single- and dual-photon techniques
bone mineral analysis, 163
Angiography, radionuclide
contrast versus first pass
left ventricular wall motion, ab16
left ventricular volume, ab17
myocardial dyskinesis, 121
Anti-fibrin antibody
indium-111-labeled
thrombi and emboli imaging, ab14
Astrocytoma
residual high grade
thallium-201 localization, ab9
Atrial fibrillation
gated blood-pool imaging
cycle length windowing in, ab19
Autoradiography
digitized, ab6

Bladder
quantification of renal function, 3
Blood-brain barrier
breakdown
SPECT and MRI efficacy in, ab10
disruption
mannitol-induced, brain imaging for malignant tumors, ab9
Blood flow
cerebral
measurement, xenon-133 inhalation method, ab10
Novo 10-a cerebrograph, ab9
xenon-133 saline solution, 75
Blood-pool imaging
gated
cycle length windowing in, atrial fibrillation, ab19
myocardial dyskinesis, ab20
variation in quality, red blood cell labeling techniques, 63
myocardial dyskinesis, ab10
Bolus injection
inspiration on, 1
Bone
absorptiometry
technical considerations, ab13
cavernous hemangiomas
technetium-99m RBC, 146
growth plate abnormalities
knee, SPECT techniques, ab13
lesions
operative localization, ab13
lumbar spine
technetium-99m MDP effects, absorptiometry, ab12
mineral analysis
single- and dual-photon absorptiometry, 163
mineral density
collimator size and source strength effects, ab12
dual photon absorptiometry, ab12
therapeutic agent
procedures for evaluating, ab6
Bone scans
osteoid osteoma, 138
Book reviews
Essentials of Nuclear Medicine Imaging, second edition, 113
Nuclear Pharmacy: An Introduction to the Clinical Application of Radiopharmaceuticals, 236
Single-Photon Emission Computed Tomography: A Primer, 236
Thyroid and Parathyroid Imaging, 113
Brain
blood flow
xenon-133 saline solution, 75
imaging
malignant tumors, ab9
transaxial HIPD images
parallel to cantho-meatal line, ab18

Camera, scintillation
automatic tuning, 105
moving imaging table and
lower extremity venography, 59
parathyroid gland, 34
Carotid artery
perfusion scanning
vascular response to vasoactive agents, ab9
Cerebral vascular disease
xenon-133 saline solution, 75
Cerebrograph
Novo 10-a
quality control, ab9
Chromatography
computer-controlled system
radiochemical quality control, ab7
rapid miniaturized procedures
iodinated monoclonal antibodies, ab6
Collimator
attenuation coefficients
gallium-67 and thallium-201 gamma emissions in water, ab3
indium-123 sodium-hippuran, ab18
size and source strength
bone mineral density measurements and, ab12
Computer processing
digital
nuclear medicine imaging, 21
Computers
applications of artificial intelligence in medicine, 175
chromatography system
radiochemical quality control, ab7
filtering in frequency space, 152
FORTRAN programming
nuclear medicine, 89
long-term data storage, ab4
microcomputer management
nuclear medicine department, ab3
modified Gates technique
glomerular filtration rate, ab4
Coronary artery disease (CAD)
arm ergometry
supine exercise bicycle, 135
left ventricular function
dobutamine infusion and, ab17
transesophageal atrial pacing
handgrip exercise and, ab11

Data storage
computer system for, ab4
Deconvolutional analysis
portal vein and hepatic artery flow, ab5
Departmental operations
animals for biomedical research, 42
design and efficiency relations, ab3
laboratory
response to cost containment, 11
microcomputer management, ab3
Diagnostic related group
prospective payment system, ab8
Dipyridamole
exercise
comparison with thallium-201 at rest, ab10
myocardial imaging
high risk surgical patients, ab11
Dobutamine
infusion
left ventricular function during, ab17

Domperidone
gastric emptying and, ab19
Dosimetry
radiation
determination of risk, 199
Dysprosium-165-FHMA
rheumatoid knee effusions, 18

Eating disorder syndromes
behavioral
radiotracers in gastric assessment, ab18
Education
acquiring patient histories
medical versus lay terminology, 44
animals for biomedical research, 42
artificial intelligence in medicine, 175
bone mineral analysis
absorptiometry techniques, 163
employment in nuclear medicine during pregnancy, 218
filtering in frequency space, 152
laboratory response
cost containment, 11
lymphoscintigraphy, 210
nuclear medicine technology hospital-based program, ab7
scintillation cameras
automatic tuning, 105
Effective renal plasma flow (ERPF)
standards for calculation, 132
Ejection fraction
dynamic phantom
gated heart studies, ab16
limitations of
myocardial dyskinesis, ab10
Emission computed tomography
attenuation coefficients
gallium-67 and thallium-201, ab3
Esophageal swallowing
reflux and
pediatric, ab13

Film processors
nuclear medicine and, 66

Gadolinium DTPA
blood-brain barrier breakdown, ab10
Gallium-67
citrate
pulmonary uptake of, ab16
Gastric emptying
domperidone effects, ab19
radiolabeled solids in, ab5
Gastric function
antigastroesophageal reflux barrier
indium-111 alginic acid, ab16
esophageal swallow and reflux
pediatric, ab13
Gastroesophageal reflux
indium-111 alginic acid, ab16
Gastrointestinal tract
hemorrhage
scintigraphic detection of, 79
Glomerular filtration rate
estimation
technetium-99m DTPA, 196
modified Gates technique for calculation, ab4
technetium-99m DTPA for, ab15
Growth plate
abnormalities
knee, SPECT techniques, ab13

Heart
arm ergometry
supine exercise bicycle, 135
gated blood pool image quality
red blood cell labeling techniques, 63
gated studies
dynamic phantom, ab16
localization of myocardial infarction
oblique MRI, ab19
myocardial dyskinesis
radionuclide angiographic method, ab20
myocardial perfusion agent
imaging considerations, 6
Hematoma
cold
visualized by technetium-99m RBC, 143
Hemorrhage
gastrointestinal
scintigraphic detection of, 79
Hepatic artery
flow
deconvolutional analysis, ab5
infusion pump
scintigraphic assessment of, ab19
Hepatobiliary function
endoscopic sphincterotomy, ab5
Hepatobiliary imaging
technetium-99m DISIDA, ab15
reproducibility of hepatic regional clearance, ab4
Human resource
departmental design
efficiency and, ab3

Image analysis
digital processing, 21
Indium-111 alginic acid
antigastroesophageal reflux barrier, ab16
Indium-111 monoclonal antibody
labeling of thrombi and emboli, ab14
Indium-111 oxine
practical platelet labeling with, 15
Indium-111 WBC
rapid and simple method for labeling, ab7
Indium-123 sodium-hippuran
optimal collimator for, ab18
renal plasma flow, ab14
Inspiration
bolus injection, 1
Iodine-123 HIPD
transaxial images
brain, ab18
Iodine-125
implantation
prostatic carcinoma, ab8
Iodine-131 OIH
renal plasma flow
standards for calculation, 132

Joint
rheumatoid knee effusions
therapeutic application of dysprosium-165-FHMA, 18

Kidney
function
new approach to quantification, 3
glomerular filtration rate
technetium-99m DTPA estimation of, 196, ab15
plasma flow
iodine-123 agent for, ab14
standards for calculation, 132

Letter from the editor, 235
Letters to the editor, 111, 183

Liver
imaging
SPECT, ab7
Y-90 microsphere effects, ab8
Lung
severe parenchymal disease
radio-aerosol lung scintiscanning, ab14
technetium-99m DTPA
radioaerosol, 111(Ie)
uptake of gallium-67 citrate, ab16
Lung-to-heart quantification
thallium, 193
Lymphatics
technetium-99m dextran
quality control, ab19
Lymph node
imaging
internal mammary and iliopelvic, 210
Lymphoscintigraphy
internal mammary and iliopelvic, 210

Magnetic resonance imaging (MRI)
blood-brain barrier breakdown, ab10
oblique
localization of myocardial infarction, ab19
Marketing
nuclear medicine, 225
Monoclonal antibodies
iodinated
rapid miniaturized chromatography procedures, ab6
radioiodinated
technical quality control, ab6
Myocardium
acutely infarcted tissue
technetium-99m pyrophosphate in, ab18
dyskinesis
radionuclide angiographic method, ab20
radionuclide angiography, 121
radionuclide ejection fraction, ab10
infarction
oblique MRI for localization, ab19
small infarction mass
after cardiac surgery, SPECT measurement of, ab11
thallium-201 washout in
quantitative tomography, ab4

Nuclear medicine practice
reexamination of NMTCB Critical Task Survey, 228

Oncology
splenic radiation ports, ab8
Osteoid osteoma
bone scans in diagnosis and surgery, 138

Parathyroid glands
scanning, 34
Patient history
medical versus lay terminology, 44
Platelets
labeling
indium-111 oxine, 15
method for labeling with indium-111, ab7
Portal vein
flow
deconvolutional analysis, ab5
Pregnancy
employment in nuclear medicine during, 218
President's message, 49, 116, 184, 238
Product comparison
technetium-99m macroaggregated albumin, 206

Prospective payment system
implementation, ab8
nuclear medicine, 185
Prostate
carcinoma
I-125 seed implantation for treatment, ab8
Pulmonary embolism
LFOV camera
moving imaging table and, lower extremity venography, 59

Quality control
radiopharmaceuticals, 202
technetium-99m macroaggregated albumin, 206

Radiation, risk
determination method, 199
Radiation therapy
dysprosium-165-FHMA
rheumatoid knee effusions, 18
Radioactive waste
rapid estimation of activity in storage, 183(le)
Radioassay
laboratory response
cost containment, 11
Radiolabeled meal
evaluation of gastric emptying, ab5
Radiopharmaceuticals
quality control, 202
Radiotracers
gastric assessment
behavioral eating disorders, ab18
Reticuloendothelial system
imaging
technetium-99m albumin colloid kit, 149

Salivary gland
function
technetium-99m pertechnetate, ab5
Samarium-153-EDTMP
procedure for evaluating, ab6
Scintigraphy
bone
MDP and DPD comparison, ab12
gastrointestinal hemorrhage, 79
hepatic artery infusion pump, ab19
stress
transesophageal atrial pacing and handgrip exercise, ab11
Scintillation probe
bone lesions, ab13
Self-assessment quiz
nursing care part II, 47
three-phase bone scanning, 182
Single photon emission computed tomography (SPECT)
blood-brain barrier breakdown, ab10
growth plate abnormalities
knees, ab13
hepatobiliary imaging, ab15
intensity alterations
liver/spleen imaging, ab7
quantitation of images, ab17
skeletal imaging
detection of injury, ab11
small myocardial infarction mass
after cardiac surgery, ab11
transaxial HIPD images
cantho-meatal line, ab18
Sphincterotomy
endoscopic
hepatobiliary function in, ab5
Spleen
imaging
SPECT, ab7
radiation ports
radioisotope technique for, ab8

Technetium-99m
labeling red blood cells
techniques, 63
myocardial perfusion agent
imaging considerations, 6
radiochemical stability of, 202
Technetium-99m albumin colloid
reticuloendothelial system imaging, 149
Technetium-99m dextran
quality control, ab19
Technetium-99m DISIDA
hepatobiliary imaging
SPECT, ab15
hepatobiliary scintigraphy
reproducibility of hepatic regional clearance, ab4
Technetium-99m DPD
comparison with MDP
bone scintigraphy, ab12
Technetium-99m DTPA
differential renal function, 3
glomerular filtration rate estimation, 196, ab15
modified Gates technique
glomerular filtration rate, ab4
radioaerosol delivery systems, 111(le)
Technetium-99m macroaggregated albumin
commercial kits
multi-institutional evaluation of, 206
LFOV camera
moving imaging table and, lower extremity venography, 59
Technetium-99m MDP
comparison with DPD
bone scintigraphy, ab12
Technetium-99m pertechnetate
salivary gland function, ab5
Technetium-99m pyrophosphate
acutely infarcted myocardial tissue, ab18
small myocardial infarction mass
after cardiac surgery, ab11
Technetium-99m RBC
cavernous hemangiomas of bone, 146
cold hematoma visualized by, 143
Thallium-201
arm ergometry
supine exercise bicycle, 135
at rest
comparison with dipyridamole and exercise, ab10
lung-to-heart quantification, 193
myocardial imaging
high risk surgical patients, ab11
parathyroid scanning, 34
residual high grade astrocytoma, ab9
washout
myocardium, quantitative tomography, ab4
Therapeutic nuclear medicine
I-125 seed implantation
prostatic carcinoma, ab8
Thrombosis
labeling
anti-fibrin antibody, ab14
LFOV camera
moving imaging table and, lower extremity venography, 59
Thyroid
cancer
imaging without discontinuance of medication, ab14
parathyroid scanning, 34
thyroxine-binding globulin capacities, 70
Thyroxine-binding globulin
free thyroxine index and, 70
Tomography
quantitative
thallium-201 washout in myocardium, ab4
Tomography, radionuclide
myocardial perfusion agent
imaging considerations, 6
Tumors
bone
operative localization, ab13

Vasoactive agents
vascular response
carotid artery reperfusion scanning, ab9
Ventilation studies
radio-aerosol lung scintiscanning
severe parenchymal lung disease, ab14
Ventricular function
dobutamine infusion and, ab17
volume
radionuclide angiography, ab17
ventriculography, ab17
wall motion
radionuclide angiography, ab16
Ventriculography
left ventricular volume, ab17
Vesicoureteral reflux
detection in asymptomatic siblings, ab13

Xenon-133
inhalation method
cerebral blood flow measurements, ab10
saline solution
methods of preparation, 75

Y-90 microspheres
intraarterial administration
hepatotoxicity of, ab8